

novelty in administration ; and the working of the new experiment will necessarily be watched with much solicitude by all persons who have at heart the improvement and development of our system of public education.

The following are the names of the eighteen persons who are nominated as the first members of the Consultative Committee :—

- Right Hon. Arthur Herbert Dyke Acland.
- Sir William Reynell Anson, Bart., M.P.
- Professor Henry Armstrong.
- Mrs. Sophie Bryant.
- Right Hon. Sir William Hart-Dyke, Bart., M.P.
- Sir Michael Foster, K.C.B., M.P.
- Mr. James Gow, Litt.D.
- Mr. Ernest Gray, M.P.
- Mr. Henry Hobhouse, M.P.
- Mr. Arthur Charles Humphreys-Owen, M.P.
- Sir Richard Claverhouse Jebb, M.P.
- Hon. and Rev. Edward Lyttelton.
- Very Rev. Edward Craig Maclure, D.D., Dean of Manchester.
- Miss Lydia Manley.
- The Ven Ernest Grey Sandford, Archdeacon of Exeter.
- Mrs. Eleanor Mildred Sidgwick.
- Professor Bertram Coghill Alan Windle, M.D.
- Rev. David James Waller, D.D.

It will be noticed that with the exception of the two former Vice-presidents of the Council, and of Mr. Hobhouse, all the persons named in this list may be regarded as representatives of "bodies interested in education." Oxford, Cambridge and London are most appropriately represented by their respective Members of Parliament ; two of the proposed members are head-masters of public schools, one has been a teacher in a public elementary school, one is a High School mistress, another lady is the head of Newnham College, a third is the mistress of a training college for school-mistresses, and may also be reckoned as a representative of the British and Foreign School Society. Science and technology have their advocates in Prof. Armstrong and Sir Michael Foster ; the Established Church and the National Schools are represented by Archdeacon Sandford the Roman Catholics by Prof. Windle, and the Nonconformists by Dr. Waller, Wales and the Welsh Intermediate Schools by Mr. Humphreys-Owen, and the School Boards of England by Dean Maclure, the chairman of the Manchester School Board. There can be no doubt that an excellent selection of names, typical of various classes, and likely to command the public confidence, has been made by the Lord President and his advisers.

Nevertheless, it was generally hoped and expected that, while two-thirds of the number were very rightly and in fulfilment of the express intentions of the Act to be composed of persons able to express the views of different academic and professional bodies, the remaining third would consist of persons detached from sectional interests, and specially qualified by breadth of view, by large acquaintance with schools and institutions of various classes, both here and in foreign countries, and by a disinterested concern for the interests of national education as a whole, to render service in consultation with the Board of Education. No such proportion has, however, been observed in the composition of this committee. Like some recent Royal Commissions, to which have been entrusted duties especially demanding wide knowledge and judicial impartiality, the chief ingredients in the committee are advocates and partisans specially charged to look after the interests of particular institutions, creeds, or professional bodies. It appears to be assumed that the resultant of all these opposing forces will be a satisfactory conclusion. But when it is considered that one of the first duties of the committee will be to determine the conditions on which teachers shall be ad-

mitted to the official register, and that it will be the task of that committee to determine the kind of qualification which should be recognised, and the relative claims of a great number of different institutions, both public and private. it becomes evident that the list of the proposed committee is seriously incomplete. One of the most important questions which will in due course inevitably demand its attention is the examination and inspection of secondary schools, and it is quite conceivable that on this point professional interests may not prove to be precisely identical with the public interests. It may be hoped that attention will be given to these considerations before October, when the committee is for the first time to be summoned. It is indispensable that a body charged with such novel and weighty responsibilities should from the first command the full confidence of all those who are conscious of the defects in our present system, and who are concerned more with its due expansion and its fulfilment of high national ideals than with the conservation of any traditions and interests, however important and deserving of respect, which belong to particular classes or institutions.

THE INTERNATIONAL ASSOCIATION OF ACADEMIES.¹

THE Academy will recall the fact that at the conclusion of the mission entrusted to M. Moissan and myself, consent was given to the "Projet de Statuts pour l'Association internationale des Académies," drawn up by the delegates of the nine Academies represented at the Conference held at Wiesbaden early in October last, at the invitation of the Academy of Berlin.

The International Association is now constituted ; and it includes the eighteen following Academies :

1. Academy of Sciences Amsterdam.
2. Prussian Academy of Sciences Berlin.
3. Academy of Sciences, Literature and the Fine Arts Brussels.
4. Hungarian Academy of Science Budapest.
5. Academy of Sciences Christiania.
6. Society of Sciences Göttingen.
7. Academy of Sciences of Denmark Copenhagen.
8. Academy of Sciences of Saxony Leipzig.
9. Royal Society London.
10. Academy of Sciences of Bavaria Munich.
11. Academy of Inscriptions and Literature Paris.
12. Academy of Sciences Paris.
13. Academy of Moral and Political Sciences Paris.
14. Academy of Sciences St. Petersburg.
15. Academy dei Lincei Rome.
16. Swedish Academy of Sciences Stockholm.
17. Academy of Sciences Washington.
18. Academy of Sciences Vienna.

Amongst the Academies invited to join, one only, the Royal Academy of History of Madrid, has as yet not replied to the request of the Wiesbaden Conference.

The provisional rules take into consideration the possibility of the addition of other learned societies, and in § 2 the conditions and formalities are indicated which will be necessary for the admission of a new Academy.

The Association comprises two Sections, the Section of Literature and the Section of Science. The work will be carried out by general meeting and committee. In principle, the general meeting will be held every three years, and each Academy will send as many delegates as it may deem necessary, but each Academy will have only one vote, which should be given by one of the members of the delegation.

In the interval between two general meetings, the Association is represented by the committee, each

¹ Translation of a report made to the Paris Academy of Sciences on July 2, by M. Darboun, permanent secretary of the Academy.

Academy being represented on this by one member only, if it concerns itself with only one of the Sections of Literature or Science; it will send two delegates when it is concerned with both Sections. Amongst the eighteen Academies, twelve belong to both Sections and consequently will send two delegates to the committee. Of the other six, four, namely the Royal Society of London, the Academy of Sciences of Paris, the Academy of Stockholm, and the National Academy of Washington, belong to the Section of Science alone, and two, the Academy of Inscriptions and Literature, and the Academy of Moral and Political Sciences, belong to the Section of Literature. Hence the committee will consist of thirty delegates, of which sixteen will belong to the Section of Science, and fourteen to that of Literature. In full committee the two delegates of one Academy will have only a single vote. After delay, inevitable in such cases, all the Academies, with the exception of two or three, have sent in the names of their delegates. The delegate of the principal Academy will take the chair at the committee of the Association, the principal Academy being that of the place in which it is proposed to hold the next general meeting.

The Conference of Wiesbaden having decided on a resolution to which we can here only draw attention, that the first general meeting of the International Association should be held in Paris this year, a difficulty has arisen not foreseen when the provisional rules were drawn up. Three Parisian Academies having joined the Association, it is necessary to decide to which shall be assigned the Presidency on this occasion. The delegates of the three Academies of the Institute of France have met, and have unanimously decided to confer for this year the presidency of the Association upon the Academy of Sciences, which was the first to join the Association, and, moreover, has taken an active part in the discussions, at the conclusion of which the Association was constituted.

It has been further decided that the first Session of the committee shall be held in Paris towards the end of July, the first meeting being fixed for Tuesday, July 31, at 9.30 a.m., at the Palais de l'Institut.

The agenda for the first meeting will include the preparation of a scheme of government for the committee, the settlement of the exact date and the order of the day for the next general meeting. The Royal Society of London, which has taken so active a part in the formation of the Association, has already announced a scheme which it proposes to submit for approval to this next general meeting; it concerns the measurement of an extended arc of a meridian in the interior of Africa.

The Academy, by the act of joining, has subscribed to the rules of the new Association. There is no occasion to recall here with what prudence and moderation they have been drawn up. The object of the Association is to prepare and promote scientific work of general interest which may be proposed by one of the constituent Academies, and generally to facilitate scientific relations between different countries. In any particular case, each Academy reserves to itself the right to give or refuse its support, or decide the choice of methods and the means to be employed.

If these principles are followed, the Association will become a powerful instrument of study, of concord and of scientific progress; it will rapidly take its place in the front rank of those international scientific associations, the rôle of which must necessarily be satisfactory.

Faithful to the principles which they have always followed, the three Academies of the Institute of France, called by the nature of their studies into the Association, will strive to assure it the success and influence which have been desired for it by its promoters.

Finally, attention may be directed to a particular clause in the rules which will interest some of our

colleagues. For taking into consideration the study or preparation of scientific enterprises or researches of international interest, upon the proposition of one or more of the associated Academies, special international commissions may be instituted either by the general meeting or one of its two Sections, or, in the interval between two general meetings, by the committee or one of its two Sections.

THE NEW PHYSICAL LABORATORY AT OWENS COLLEGE.

OWENS COLLEGE recently held high festival on the occasion of the opening, by Lord Rayleigh, of the new physics laboratories. Of these, a preliminary account was given in NATURE of October 27, 1898, on the occasion of the laying of the foundation-stone. As the size of the new building surpasses that of any other physical laboratory in this country, it was fitting that the occasion should be marked by a ceremony of some importance, and dignified by the presence of a number of leading physicists from all parts of the country.

The main features of the new laboratories, as planned by Prof. Schuster, were described in our former article; but it remains to state how they have been carried out. The new building is separated by Coupland Street from the main quadrangle of buildings of which Owens College consists, though it is joined to the older buildings by an underground passage. It is a commodious structure, having three complete storeys above the basement, with simple but effective decorative features both internal and external. The frontage is about 110 feet wide, and the main building extends about 90 feet back. The ground floor is devoted to rooms for electrical measurement, the magnetic testing of iron, electrochemistry, a workshop and a private laboratory. The first floor contains a large laboratory for elementary teaching (36 feet by 44 feet in dimensions), a balance room, a room for chemical physics, two laboratories for electricity and one for optics. On the second floor is a fine lecture theatre with raised auditorium, preparation room, museum and apparatus room, a class-room and two smaller laboratories, and a special room fitted up for physical optics; its special feature being the equipment, designed by Sir Howard Grubb, necessary for working with a 6-inch Rowland grating. From this floor an upper staircase leads to a small astronomical observatory containing an excellent 10-inch equatorial by Cooke, the gift of Sir Thomas Bazley. In the basement are rooms for spectroscopic and photographic work, a cryogenic laboratory and a room for researches at constant temperature. The arrangements for heating, ventilating, and for the supply of gas, electricity, water, steam and compressed air are exceedingly complete. In the ventilation system, the air supplied through a fan and warmed by passage through a flue heated by the gases of the boiler-furnaces, is passed over a surface of oil to deprive it of its dust and prevent blackening effects.

A very important adjunct to this fine building is the John Hopkinson memorial wing for electrotechnics. This consists of two large rooms on the ground floor: one (27 feet by 50 feet) to serve as a dynamo room, the other an electrochemical laboratory (36 feet by 37 feet), together with basement rooms for gas engine, counter-shaft for dynamo-driving, photometers, and heating apparatus. In the dynamo room, where already are placed several of Wilde's dynamos and some more recent types, there is a fine bronze portrait tablet of the late Dr. Hopkinson. The cost of this wing has been defrayed by the parents and relations of the lamented Dr. Hopkinson, who was himself an alumnus of Owens College.

The opening ceremony on the 29th ultimo began with